

Earth Science Standards:

- 3b. Students know the principal structures that form at the three different kinds of plate boundaries.
- 4a. Students know the relative amount of incoming solar energy compared with Earth's internal energy and the energy used by society.
- 9a. Students know the resources of major economic importance in California and their relation to California's geology.

Physics Standards:

- 3b. Students know that the work done by a heat engine that is working in a cycle is the difference between the heat flow into the engine at high temperature and the heat flow out at a lower temperature (first law of thermodynamics) and that this is an example of the law of conservation of energy.
- 5h. Students know changing magnetic fields produce electric fields, thereby inducing currents in nearby conductors.

Chemistry Standards:

- 11c. Students know some naturally occurring isotopes of elements are radioactive, as are isotopes formed in nuclear reactions.
- 11e. Students know alpha, beta, and gamma radiation produce different amounts and kinds of damage in matter and have different penetrations.

Investigation and Experimentation Standards:

- 1h. Read and interpret topographic and geologic maps.
- 1k. Recognize the cumulative nature of scientific evidence.